Public Works (1909) Department.

1/176

1

GOVERNMENT ... 12 MAY 1909 ... MADRAS

G.O., No. 176/A+B 9

8.8.9-10

DATED 26-4-1909.

The Notes in this G.O. have been printed.

[Despatch Abstract.]

No. 3 Thiruvadu Periya Kanmoy, Periyar System

The estimate, amounting to Rs 11,341, for constructing a weir at the left flank of —— sanctioned and a copy of the Procs ordered to be forwarded to the C. of I for information

No. 3. Tiruvadu Periya Kanmoy, Periyar System

Forwarding a copy of the Procs sanctioning an estimate of Rs 11,341 for constructing a weir at the left flank of ——.

Registered as No 14-1 of 1908-10.

[P. W. G. 1,500—20-7-08.]

Indexed

பாதுகாப்பு பிரிவு

செப்பனிடுபவர் பெயர் : மு. பாஸ்கர்

செப்பனிடுவதற்காக எடுத்துக்-
கொள்ளப்பட்ட நாள். 12/09
செப்பனிட்டு முடித்த நாள். 1/10

சரிபார்க்கும் முதல் முநிபாள கையொப்பம்	சரிபார்க்கும் 2ம் முநிபாள கையொப்பம்	ஆராய்ச்சி உதவியாளர் கையொப்பம்

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Government of Madras.

PUBLIC WORKS DEPARTMENT.

IRRIGATION.
ACCOUNT.

Recd.	1909.	*Enclosures*
Regd.		*Spare copies*

G.O., Nos. 176/A, 176/B I., 26th April 1909.

No. 3 Thiruvadur Periya Kanmoy, Periyar System

Forwarding a copy of the Proceedings sanctioning an estimate of Rs. 11,341 for constructing a weir at the left flank of —.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

READ—the following papers:—

I

Letter—from H. E. CLERK, Esq., Superintending Engineer, VI Circle.
To—the Chief Engineer for Irrigation.
Dated—Trichinopoly, the 17th March 1909.
No.—229 C.E.

I have the honour to forward herewith for your approval and sanction of Government an estimate, amounting to Rs. 9,000, for constructing a weir at the left flank of No. 3 Thiruvadur Periya Kanmoy, an important tank in the Periyár area, Mélúr taluk.

2. During your recent tour of inspection in the Periyár area, you saw the site and called for an estimate to provide adequate surplus arrangements to the tank, in your notes of inspection communicated to me with your endorsement No. 796, dated 1st March 1909.

3. The necessity for the proposed work and the details of the tank are fully explained in the report attached to the estimate.

4. As the proposed work is to be completed before the commencemet of the next irrigation season, the Executive Engineer has been asked to collect materials in anticipation of sanction to the estimate. The rates entered in the estimate are fair and its early sanction is requested.

5. An estimate, amounting to Rs. 780, for repairs to the tank, being within my powers of sanction, has been returned sanctioned to the Executive Engineer, Madura division, for execution.

ENCLOSURE.

Report to accompany the estimate for improvements to No. 3 Thiruvadur Periya Kanmoy, Mélúr taluk.

	RS.
Amount of estimate	9,000

General.—No. 3 Thiruvadur Periya Kanmoy (otherwise known as Periya Kanmoy and Nallan Pillai Petta Kanmoy) is one of those tanks ordered to be maintained in G.O., No. 1250 I., dated 15th December 1906, and situated at the tail end of the Thiruvadur offtake of the X Branch channel, Periyár Main canal.

Supply.—The tank in addition to its supply from its catchment receives a supply of Periyár water from the Thiruvadur offtake of the X Branch channel.

Sluices.—To irrigate the present ayacut of 536 acres under the tank, there are 4 sluices in the tank in good order requiring neither repairs nor improvements.

F.T.L.—The F.T.L. of the tank has been fixed with reference to the crest of the existing weir at the right flank of the tank. An extent of 6·73 acres of patta land is liable to be submerged at F.T.L. but the submergence is mamool and no action is necessary with respect to it.

Bund.—The bund of the Periya Kanmoy for the great part of its length carries the Local Fund road (from Mélúr to Thiruvadur) and the ruins of the massive fort wall of Thiruvadur forms another part of its bund. These require no repairs. The only portion of the bund that

requires strengthening is its right flank and the whole of that portion of the bund of the tank called Nallan Pillai Petta Kanmoy. Provision is made in a separate estimate for repairs to the tank for strengthening it to the standard given in the descriptive memoir sheet attached (viz., to raise it to 3 feet above M.W.L. with top width 6 feet and slopes 1½ to 1 on both sides).

The bund of the tank is revetted and the revetment is in good order.

Surplus arrangements.—The tank at present surpluses over a masonry weir at the right flank and calingula at the left flank. The existing surplus arrangements being inadequate to discharge the maximum quantity estimated as likely to enter the tank, and the calingula at the left flank being damaged beyond repairs, it has been proposed to construct a masonry weir 284 feet long as per plan enclosed capable of discharging the full quantity of surplus.

The run off channel in rear of this escape tails into the Upper odai which goes to zamin lands, while the surplus at the right flank goes through wet fields to No. 1, Kilapallakurichi tank.

H. E. CLERK,
Superintending Engineer, VI Circle.

II

Note by the Chief Engineer for Irrigation.

With his letter No. 229 C.E., dated 17th March 1909, the Superintending Engineer, VI Circle, submits an estimate, amounting to Rs. 9,000 for constructing a masonry weir at the left flank of the Thiruvadur Periya Kanmoy in the Periyár affected area, Mélúr taluk.

2. It is stated that the tank has a masonry weir, 94 feet long at the right flank, and a ruined calingula at the left, and that as the existing surplus arrangements are quite inadequate to dispose of the discharge from a combined catchment area of 25·13 square miles, it is proposed to construct a weir 284 feet long in place of the ruined calingula at the left flank.

3. The amount of the estimate has been increased to Rs. 9,220 in this office owing to the raising of the wings at the ends to 2 feet above M.W.L. and of the front returns to M.W.L. The top width of the wings and returns has also been increased to 2 feet. The estimate, as altered, is recommended for sanction.

4. The Superintending Engineer's action in having authorised the Executive Engineer to collect materials in anticipation of sanction to the estimate may be approved as it is stated that the tank is an important one irrigating 536 acres and the proposed surplus weir has to be completed before the next irrigation season.

C. A. SMITH,
Chief Engineer for Irrigation.

19*th April* 1909.

Order—No. $\frac{176}{A}$ I., dated 26th April 1909.

The recommendations of the Chief Engineer for Irrigation are approved, and the following estimate sanctioned :—

Imperial.
Capital Expenditure not charged to Revenue.
49. Irrigation.
Periyár System.
Open Capital Account.
I. Works.
3. Distributaries.
C. Works.
Unremunerative Work.
Constructing a weir at the left flank of No. 3 Thiruvadur Periya Kanmoy.

	RS.
Estimate—	
I. Works	9,220
II. Establishment	2,121
Total ...	11,341

2. This sanction is registered as No. 14 I. of 1909-1910 and will expire on the 31st March 1911.

3. The following telegram will be sent to the Superintending Engineer, VI Circle :—

"Your number 229 C.E., dated 7th March 1909. Estimate sanctioned."

4 Ordered that a copy of these Proceedings be forwarded to the Government of India for information.

[Here enter No. $\frac{176}{B}$ I., dated 26th April 1909.]

(True Extract.)

C. A. Smith,
Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Chief Engineer for Irrigation.
" Superintending Engineer, VI Circle, with estimate and plans.
" Examiner, Public Works Accounts.

Endorsement—No. $\frac{176}{B}$ I., dated 26th April 1909.

Forwarded.

(By Order.)

C. A. Smith,
Joint Secretary to Govt., P.W.D.,
Irrigation Branch.

PUBLIC WORKS DEPARTMENT
(IRRIGATION BRANCH).

NOTES CONNECTED WITH G.O., No. $\frac{176}{A \& B}$ I., DATED 26TH APRIL 1909.

[SUBJECT.—*Estimate, amounting to Rs. 9,000, for constructing a weir at the left flank of No. 3 Thiruvadur Periyar Konmoy, Periyar affected tank, Melur taluk, Madura district.*]

From the Superintending Engineer, VI Circle, dated 17th March 1909, No. 229, C.E.

Under Secretary—

With reference to the instructions issued in the Inspection notes of February 1909, the Superintending Engineer submits an estimate for constructing a weir at the left flank of No. 3 Thiruvadur Periya Konmoy and states that he has given permission to the Executive Engineer to collect materials in anticipation of sanction to the estimate, as the work is to be completed before the commencement of the next irrigation season. The Superintending Engineer's action may, it is submitted, be approved and the estimate checked for early sanction.

Copy put up, the original having been transferred to Secretary's office for issue of the draft order.

C.A.S.
24-3-09.

2. As regards repairs to the tank, Mr. Clerk states that he has sanctioned an estimate, amounting to Rs. 750, being within his powers of sanction.

S. A. VENKATARAMIER.
23-3-09.

S. SRINIVASA RAO.
23-3-09.

Ayacut is 457 acres; waterspread 155 acres. May be approved.

T. W. S. SMYTH.
24-3-09.

Check soon.
Width of water cushion seems insufficient.

C. A. SMITH.
24-3-09.

Under Secretary—

As the design of the weir as submitted by the Superintending Engineer is defective in some respects a revised design has been drawn in pencil and put up herewith for approval with the following remarks:—

(1) The width of the cushion as allowed by the Superintending Engineer is insufficient. The depth and width of the cushion have now been provided according to the instructions given in Circular Memorandum No. 1323 of 4th April 1907.

(2) A reversed slope of 1 in 3 has now been given to the cushion; the top 1½ feet of the cushion floor is to be of roughstone in mortar pointed with surki mortar as the cutstone floor is costly. This method has been adopted in the drops of the Mopad project.

(3) The top of wings next to the bodywall is only 1 foot above M.W.L. The wings and returns in front have now been raised to 2 feet above M.W.L.

(4) The cross section plotted in the weir plan is the one at A marked on the site survey (*i.e.*, at one end of the weir). The cross section at B has now been plotted to show the ground levels as secured out and the bed level of the stream into which the surplus joins. The M.F.L. of the odai or stream has not been noted anywhere.

(5) Cutstone coping on top of bodywall and retaining wall has been retained, but coping on top of wings and returns has been omitted.

The hydraulic particulars have been checked. The estimate of the revised design amounts to Rs. 11,000 against Rs. 9,000 submitted by the Superintending Engineer.

No data sheet, to show how the rates entered in the estimate have been arrived at, has been submitted. The Superintending Engineer in paragraph 4 of his letter states that the rates given in the estimate are fair and requests early sanction to the estimate as the work has to be completed before the next irrigation season. Revised schedule of rates for the divisions in the sixth circle have not yet been submitted by the Superintending Engineer.

Orders are requested if the revised design and estimate may be completed and fair copied for sanction.

M. VASUDEVA AIYAR.
6-4-09.

G. E. BRAND.
6-4-09.

Joint Secretary—

No. Mullin's paragraph 83 may be followed and Superintending Engineer's plan will do and may be sanctioned.

C.A.S.

The wings should be raised and thickened.

T.W.S.S.
6-4-09.

No.

C.A.S.
6-4-09.

I have not hitherto understood that tank weirs should be treated in regard to cisterns the same as falls on channels. Is the long reverse (1 in 3) slope necessary when there is no gravel or other hard material to be carried on?

T.W.S.S.
6-4-09.

Through the Superintendent, Finance Section—
The draft may be completed in Finance branch, before it is sent to Ootacamund.

M.V.
14-4-09.

Draft order placed below.

M.A.
15-4-09.

The wings at the ends have been raised to 2 feet above M.W.L. and the front returns to M.W.L. The estimate has been increased from Rs. 9,000 to Rs. 9,100. A draft note is put up for orders.

M.V.
14-4-09.

G.E.B.
14-4-09.

Under Secretary—

A draft order sanctioning the estimate is submitted for approval and may be circulated to His Excellency if considered necessary under the discretionary * powers now vested in Joint Secretary.

* *Vide* Note to G.O., No. 40 I., dated 1st February 1909.

T. S. RAMIAH.
15-4-09.

T.W.S.S.
17-4-09.

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I think I have ordered already, but, if not, Technical Section should note now that no wing returns should be less than 2 feet thick at top. Alter accordingly and the estimate can then be passed. It need not go to His Excellency.

C.A.S.
19-4-09.

Joint Secretary—

The top width of the wings and returns has been increased to 2 feet and the estimate has been altered accordingly. The amount of the estimate has been increased from Rs. 9,100 to Rs. 9,220. The necessary alterations in the draft order and Chief Engineer's note have now been made.

For orders if the draft order may now issue.

T. KRISHNA RAO,
26-4-09.

M. S. VENKATARAMIER.
26-4-09.

Joint Secretary—

Manager—
A circular should issue as I do not think there are any standing orders on the point.

Please state what the minimum thickness for brickwork should be $2\frac{1}{2}$ or 3 bricks stock size.

T.W.S.S.
26-4-09.

Make minimum thickness $2\frac{1}{2}$ bricks or 1′ $10\frac{1}{2}$″ inches for brickwork and 2 feet for stone masonry. Alter estimate accordingly and issue orders.

C.A.S.
26-4-09.

Under Secretary—

Yes I know these are general orders.
T.W.S.S.

The wings and returns are of stone masonry and the estimate has already been altered with top width 2 feet.

Submitted that the draft order may now issue.

T.K.
26-4-09.

Note.—File to be returned to Chief Engineer's office after issue of Government Order.
M.A.
29-4-09.

Issue.

T.W.S.S.
26-4-09.

[Issued as G.O., No. $\frac{176}{A \& B}$ I., dated 26th April 1909.]

6/176

P.W.D., Irrigation.

CURRENT No. 4326
PASSED ON BY
R. C.
C. } 30.4.09
REF.
R. K.
D. O.

Note by the Chief Engineer
for Irrigation.

With his letter No. 229 C.E., dated 17th March 1909, the Supg. Engr. VI Circle, submits an estimate amounting to Rs. 9,000 for constructing a masonry weir at the left flank of the Theruvadur Periyakonmoy in the Periyar affected area, Melur taluk.

2. It is stated that the tank has a masonry weir, 94 ft long at the right flank, and a ruined calingulah at the left, and that as the existing surplus arrangements are quite inadequate to dispose of the discharge from a combined catchment area of 25.13 sq.miles, it is proposed to construct a weir 284 ft long in place of the ruined calingulah at the left flank.

3. The amount of the estimate has been increased to Rs 9220 in this office owing to the raising of the wings at the ends to 2 feet above M.W.L. and of the front returns to M.W.L.. The top width of the wings & returns has also been increased to 2 feet. The estimate, as altered, is recommended for sanction..

4. The Supg. Engr's action in having authorised the Ex. Engineer to collect materials in anticipation of sanction to the estimate may be approved as it is stated that the tank is an important one irrigating 536 acres and the proposed

surplus

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surplus weir has to be completed before the next irrigation season.

FEI to complete the draft & send it to orly.

Lew 14/4

Draft order put up for approval
JMH 15/4

DEI

[illegible] 19/4

EI

Lew 14/4/09
SEI 14.4.09
JMH 15/4/09

RN-1903.

SUBJECT.— Estimate of Rs 9,100 ("works") for constructing a weir at the left flank of No 3 Theonvadur Periya Kanmoy.

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PUBLIC WORKS DEPARTMENT,

IRRIGATION BRANCH.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

READ the following

From the Supg Engr:, VI Circle, d/ 17. 3. 09, No 229-C.E.
Note by the Chief Engineer for Irrigation, d/ 8. 4. 09.

Print Report: → attached to the draft order.

Order, No. 176 I d/ 26-4-09

The recommendations of the Chief Engineer for Irrign are approved, and the following estimate sanctioned:—

Imperial.

Capital Expenditure not charged to Revenue

49 - Irrigation.

Periyar System.

Open Capital Account.

I - Works.

3. Distributaries

C. Works.

Unremunerative work

Constructing a weir at the left flank of No 3 Theonvadur Periya Kanmoy.

2

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BP

Estimate { I Works . 9220 ~~9,100~~ R
II Establt 2121 ~~2,093~~

Total 11341 ~~11,193~~

2. This sanction is registered as No 14 – I of 1909 – 10 and will expire on the 31st March 1911.

3. The following telegram will be sent to the Supg. Engr:, VI Circle: —

" Your number 229 C.E dated 7th March 1909. Estimate sanctioned."

4 Ordered that a copy of these Proceedings be forwarded to the Govt of India for information.

HC
O. Please have this telegram despatched from Coty after the draft order is approved.
15.4.09

DESPATCHED
DATE 26-4-1909

DESPATCHED
28 JUN 1909

Endorst No. $\frac{176}{B}$ dd 26-4-09

Forwarded.

To
The Chief Engr: for Irrign
" Supg Engr:, VI Circle, with estimate plans
" Exam: P.W. accts

Ordinary Press

17/4/09.

19/4/09

15.4.09

DESPATCHED
22 JUN 1909